

CLAIMS

What is claimed is:

1. A lubrication system monitor for an engine, said monitor comprising:
a first sensor adapted to monitor a first condition of said engine and provide a first signal representing said first condition;
a second sensor adapted to monitor a second condition of said engine and provide a second signal representing said second condition;
a monitor circuit receiving said first and second signals and producing an output substantially constant for said first and second signals, said substantially constant output corresponding to normal operation of said engine.
2. A system according to claim 1 wherein said first sensor is a pressure sensor and said first signal is a pressure signal taken from said pressure sensor modified according to at least a charge flow constant value and by a temperature-variant value.
3. A system according to claim 1 wherein said second sensor is a flow sensor and said second signal is a lubricant fluid flow value.
4. A system according to claim 1 wherein said system further comprises a third sensor operating as a temperature sensor and providing a temperature signal, said first sensor being a pressure sensor operating in conjunction with said temperature

sensor to provide as said first signal a pressure signal modified as a function of said temperature signal.

5. A system according to claim 1 wherein said system further comprises a third sensor operating as a temperature sensor and providing a temperature signal, said first sensor being a pressure sensor providing a pressure signal and operating in conjunction with said temperature sensor to provide as said first signal a pressure signal modified as a function of said temperature signal.

6. A monitor for a machine, said machine including a lubrication system moving lubricating fluid through lubrication pathways of said machine, said monitor comprising:

a temperature sensor providing a temperature signal representing temperature of said lubricating fluid;

a pressure sensor providing a pressure signal representing a magnitude of pressure of said lubricating fluid at an input to said lubricating pathways;

a flow meter providing a flow signal representing a flow rate of said lubricating fluid entering said fluid pathway input; and

a monitor circuit receiving said temperature signal, said pressure signal and said flow signal and producing during normal operation of said machine a substantially constant output signal, said output signal varying by given magnitude from said substantially constant magnitude during abnormal, potentially-damaging operation of said machine.

7. A method of monitoring a machine including a lubrication system, the method comprising:

detecting pressure, temperature, and flow relative to said lubrication system;

calculating a value as a function of said detected pressure, temperature, and flow relative to said lubrication system, said value being within an expected range for normal operating conditions of said machine, said value being outside said expected range for potentially damaging operating conditions of said machine; and

monitoring said calculated value during operation of said machine an indication of machine operating conditions.